AMSAT News Service Weekly Bulletins
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SB SAT @ AMSAT $ANS-324.01
MORE DOVE TELEMETRY FORMATS

HR AMSAT NEWS SERVICE BULLETIN 324.01 FROM AMSAT HQ
SILVER SPRING, MD NOVEMBER 20, 1993
TO ALL RADIO AMATEURS BT
BID: $ANS-324.01

NK6K Explains More Of DOVE's Telemetry Format

The LSTAT line is sent by the loader portion of PHT (the loader/command/ telemetry task). It purpose is to show the state of the software loader process so that if something goes wrong during upload, the DOVE ground command stations can tell what needs to be done to continue the process.

The LSTAT line comes in two types, as shown below.

```
    I P:0xhhhh o:n l:nnnn f:nnnn, d:n st:n\

    A: 0xhhhh, P:0xhhhh, o:n l:nnnn f:nnnn, d:n st:n
```

I - means there is no software load in progress (inactive)

A: - means a software load is in progress (active). hhhh is the segment address of the program being loaded.

P: - the segment of the running program (PHT). The initial load of PHT is always at 0x3000. Any other address here means PHT has been reloaded.

o: - The number of times the HDLC output queue was full when PHT tried to send a frame. This is left over from debugging the only major bug found in the I/O drivers since launch. A bug occasionally caused a 65,535 byte frame to be sent, filling the output queue for nine minutes. This should always be zero.

l: - The largest free memory block, in decimal paragraphs. To find the the number of free bytes in the largest block, multiply this number by 16. This number shows the largest program that can be loaded at that time.

f: - The total amount of free memory, in decimal paragraphs.

d: - The digipeat flag, 1 is digipeat on, 0 is digipeat off. (Will always be off for DOVE)

st:- The task number of the last task loaded.

[The AMSAT News Service (ANS) would like to thank Harold Price (NK6K) for this bulletin item.]

/EX
SB SAT @ AMSAT $ANS-324.02
AMSAT OPS NET SCHEDULE

HR AMSAT NEWS SERVICE BULLETIN 324.02 FROM AMSAT HQ
SILVER SPRING, MD NOVEMBER 20, 1993
TO ALL RADIO AMATEURS BT

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Current AMSAT Operations Net Schedule For AO-13

AMSAT Operations Nets are planned for the following times. Mode-B Nets are conducted on AO-13 on a downlink frequency of 145.950 MHz. If, at the start of the OPS Net, the frequency of 145.950 MHz is being used for a QSO, OPS Net enthusiasts are asked to move to the alternate frequency of 145.955 MHz.

Date	UTC	Mode	Phs	NCS	Alt NCS
28-Nov-93	0230	B	39	WJ9F	VE2LVC
12-Dec-93	0435	B	180	W9ODI	WB6LLO
3-Jan-94	0200	B	160	WA5ZIB	N7NQM

Any stations with information on current events would be most welcomed. Also, those interested in discussing technical issues or who have questions about any particular aspect of OSCAR statellite operations, are encouraged to join the OPS Nets. In the unlikely event that either the Net Control Station (NCS) or the alternate NCS do not call on frequency, any participant is invited to act as the NCS.

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Slow Scan Television on AO-13

SSTV sessions will be held on immediately after the OPS Nets a downlink on a Mode-B downlink frequency 145.960 MHz.

/EX
SB SAT @ AMSAT $ANS-324.03
WEEKLY OSCAR STATUS REPORTS

HR AMSAT NEWS SERVICE BULLETIN 324.03 FROM AMSAT HQ
SILVER SPRING, MD NOVEMBER 20, 1993
TO ALL RADIO AMATEURS BT
BID: $ANS-324.03

Weekly OSCAR Status Reports: 20-NOV-93

AO-13: Current Transponder Operating Schedule:
L QST *** AO-13 TRANSPONDER SCHEDULE *** 1993 Nov 15-Jan 31
Mode-B : MA 0 to MA 95 ! / Eclipses, max
Mode-B : MA 95 to MA 180 ! OFF Dec 07 - 24. < duration 136
Mode-B : MA 180 to MA 218 ! \ minutes.
Mode-S : MA 218 to MA 220 !<- S beacon only
Mode-S : MA 220 to MA 230 !<- S transponder; B trsp. is OFF
Mode-BS : MA 230 to MA 256 ! Blon/Blat 240/-5
Omnis : MA 250 to MA 150 ! Move to attitude 180/0, Jan 31
AO-13 will experience another partial solar eclipse on 1993 Dec 13 [Mon]. It sees the Moon eclipse the Sun from 10:09 - 10:59 UTC with a maximum 53% obscuration at 1034 utc. This is Orbit #4211 MA 73-92. The encounter will be "visible" on the telemetry to stations throughout the USA and Japan. Reports would be appreciated. Stations who observed this spectacular eclipse of Nov 13 will know what to look for. Eclipses of sun by earth commence on Dec 07 [Tue] and continue until Dec 24 [Fri]. The eclipses are of course total. The maximum lasts 2 hours and 16 minutes, and is the longest AO-13 has ever experienced. The telemetry during these outages is very interesting, particularly the spacecraft temperatures; some reach -40 C. The Mode-B transponder will be OFF from MA 95 to 180 during this two week period. [G3RUH/DB2OS/VK5AGR]

DOVE: TLM has been copied moderately well on 145.825 MHz, with much

stronger signal levels on the S-band beacon. Please send any telemetry that you capture to PY2BJO at his INTERNET address of py2bjo@amsat.org. [W7IUV]

AO-16: Operating normally. [WH6I]

UO-22: Operating normally. [WH6I]

LO-19: Operating normally. [WH6I]

KO-23: Up and running. Busy as usual. There are a number of images. [WH6I]

KO-25: File system is up but not open for uploads. It appears that the satellite has taken and EIS image, but it is not available. [WH6I]

IO-26: Up and running with a lot of activity. [WH6I]

FO-20: The FO-20 Mode JA period on the 17-18th of November provided strong downlink and beacon signals but only moderate activity during the passes that were visible. The following is the FO-20 operating schedule:

Analog mode: 24-Nov-93 08:20 -to- 25-Nov-93 8:38 UTC
01-Dec-93 08:43 -to- 07-Dec-93 7:16 UTC
15-Dec-93 07:41 -to- 22-Dec-93 8:05 UTC

Digital mode: otherwise noted above. In December, analog mode and digital mode will be ON alternately for a week, respectively. [W7IUV & JJ1WTK]

RS-10: RS-10 has had excellent downlink signals, but only moderate activity during the last week. This bird produces more fun per pass than any other amateur satellite in orbit. [W7IUV]

The AMSAT NEWS Service (ANS) is looking for volunteers to contribute weekly OSCAR status reports. If you have a favorite OSCAR which you work on a regular basis and would like to contribute to this bulletin, please send your observations to WD0HHU at his CompuServe address of 70524,2272, on INTERNET at wd0hhu@amsat.org, or to his local packet BBS in the Denver, CO area, WD0HHU @ W0LJF.#NECO.CO.USA.NOAM. Also, if you find that the current set of orbital elements are not generating the correct AOS/LOS times at your QTH, PLEASE INCLUDE THAT INFORMATION AS WELL. The information you provide will be of value to all OSCAR enthusiasts.

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